

REMARKS

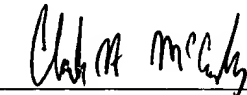
Consideration and allowance of the present application is respectfully requested. By this Amendment, claims 1-10 are amended to merely clarify the recited subject matter of the disclosed invention. New claims 11-15 are added to more fully claim the disclosed invention. No new matter is introduced thereby.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current amendment. The attached Appendix is captioned **"Version with markings to show changes made"**.

Respectfully submitted,

PILLSBURY WINTHROP LLP

By: \_\_\_\_\_



Christine H. McCarthy  
Reg. No.: 41844  
Tel. No.: (703) 905-2143  
Fax No.: (703) 905-2500

CHMASW  
1600 Tysons Boulevard  
McLean, VA 22102  
(703) 905-2000

Enclosure: Appendix

APPENDIX  
VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please amend claims 1-10 as follows:

1. (Amended) A method for selecting a modulation detector in a receiver which [comprises] includes at least a first and a second detector, the method comprising [the steps of] :

determining at least one cross-correlation value between a stored training sequence and at least one training sequence of a received signal [, **characterized** by] ; and

selecting a detector used for [detecting] detection of a signal to be received on the basis of the determined at least one cross-correlation value.

2. (Amended) [A] The method [as claimed in] of claim 1, [**characterized** in that] wherein [the step of] determining at least one cross-correlation value further comprises [the steps of] :

searching for an ideal synchronization point of the received signal, at which point the cross-correlation between the training sequence of the received signal and the stored training sequence has [the] a maximum value [,] ; and

calculating the cross-correlation value between the stored training sequence and the training sequence of the received signal, which is obtained by shifting [the] a synchronization point of the received signal for one symbol sequence at least one of forwards or backwards from the ideal synchronization point [, and/or

calculating the cross-correlation value between the stored training sequence and the training sequence of the received signal, which is obtained by shifting the synchronization point of the received signal for one symbol sequence backwards from the ideal synchronization point].

3. (Amended) [A] The method [as claimed in] of claim 1 [or 2], [**characterized** in that] wherein the received signal is a complex signal, whereby at least one cross-correlation value to be determined is a complex cross-correlation value.

4. (Amended) [A] The method [as claimed in] of claim 3, [**characterized** by] wherein [performing the step of] determining at least one cross-correlation value is performed for a given number of training sequences of the received signal, and the method further comprises:

calculating an absolute value of [the] an average of the determined cross-correlation values [, and] ;

selecting the first detector for the detection of the signal to be received if the absolute value of the average of the cross-correlation values exceeds a preset limit value [,] ; and

selecting the second detector if the absolute value of the average of the cross-correlation values is below a preset limit value.

5. (Amended) [A] The method [as claimed in] of claim 3 [or 4], [**characterized** in that] wherein the first detector includes a channel equalizer.

6. (Amended) A receiver [which comprises] comprising:

a first [(103A)] and a second [(103B)] modulation detector [,] ;

means [(100)] for determining at least one cross-correlation value between at least one training sequence [(21)] of a received signal [(IN)] and a stored training sequence [, **characterized** in that the receiver further comprises] ; and

means [(102)] for selecting [the] a detector [(103A, 103B)] used for [the] detection of [the] a signal to be received [in response to] based on the determined at least one cross-correlation value.

7. (Amended) [A] The receiver [as claimed in] of claim 6, [**characterized** in that] wherein the means [(100)] for determining at least one cross-correlation value is configured [are arranged] to search for an ideal synchronization point of the received signal [(IN)], at which point the cross-correlation between the training sequence [(21)] of the received signal and the stored training sequence has [the] a maximum value, and to calculate the cross-correlation value between the stored training sequence and the training sequence of the received signal, which is obtained by shifting [the] a synchronization point of the received signal for one symbol sequence at least one of forwards or backwards from the ideal synchronization point [, and/or

to calculate the cross-correlation value between the stored training sequence and the training sequence of the received signal, which is obtained by shifting the synchronization

point of the received signal for one symbol sequence backwards from the ideal synchronization point].

8. (Amended) [A] The receiver [as claimed in] of claim 6 [or 7], [**characterized** in that] wherein the received signal [(IN)] is a complex signal, whereby at least one cross-correlation value to be determined is a complex cross-correlation value.

9. (Amended) [A] The receiver [as claimed in] of claim 8, [**characterized** by] further comprising [means (101) that are arranged] :

[to collect] means for collecting a predetermined number of cross-correlation values determined from the training sequences of the received signal; and

[to calculate] means for calculating an absolute value of [the] an average of the determined cross-correlation values, [whereby] wherein the means [(102)] for selecting is configured [the detector are arranged] to select the first detector [(103A)] for the detection of the signal to be received if the absolute value of the average of the cross-correlation values exceeds a preset limit value, and configured to select the second detector [(103B)] if the absolute value of the average of the cross-correlation values is below [a] the preset limit value.

10. (Amended) [A] The receiver [as claimed in] of claim 8 [or 9], [**characterized** in that] wherein the first detector [(103A)] includes a channel equalizer.

New claims 11-15 are added as presented.